TORQ Analysis of Prepress Technicians and Workers to Desktop Publishers

INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Prepress Technicians and Workers	51-5022.00	Abilities:	Importance LeveL: 50	Weight: 1
To Title:	Desktop Publishers	43-9031.00	Skills:	Importance LeveL: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:		83

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	64	Level	91	Level	95

Gaps To Narrow if Possible

Ability	Level	Gap	Impt
Fluency of Ideas	55	34	65
Written Expression	50	32	68
Oral Expression	53	34	62
Oral Comprehension	55	30	68
Speech Recognition	48	36	56
Originality	51	32	62
Speech Clarity	44	32	62
Written Comprehension	51	21	81
Category Flexibility	51	27	59
Flexibility of Closure	50	27	56
Inductive Reasoning	48	26	53
Selective Attention	42	21	59
Visualization	57	17	72
Near Vision	62	13	78
Problem Sensitivity	44	14	65
Deductive Reasoning	46	17	53
Information Ordering	50	10	56

Upgrade These Skills

Skill	Level	Gap	Impt
Active Listening	65	12	78
Reading Comprehension	66	8	72

Knowledge to Add

Knowledge	Level	Gap	Impt
No Knowledge Upgrades Required!			

| Finger Dexterity | 42 | 8 | 50 |
| Visual Color Discrimination | 48 | 6 | 56 |

LEVEL and IMPT (IMPORTANCE) refer to the Target Desktop Publishers. GAP refers to level difference between Prepress Technicians and Workers and Desktop Publishers.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Prepress Technicians and Workers	Desktop Publishers	Importance
Written Comprehension	30	51	81
Near Vision	49	62	78
Visualization	40	57	72
Oral Comprehension	25	55	68
Written Expression	18	50	68
Fluency of Ideas	21	55	65
Problem Sensitivity	30	44	65
Oral Expression	19	53	62
Originality	19	51	62
Speech Clarity	12	44	62
Category Flexibility	24	51	59
Selective Attention	21	42	59
Information Ordering	40	50	56
Flexibility of Closure	23	50	56
Visual Color Discrimination	42	48	56
Speech Recognition	12	48	56
Deductive Reasoning	29	46	53
Inductive Reasoning	22	48	53
Finger Dexterity	34	42	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Prepress Technicians and Workers	Desktop Publishers	Importance
Active Listening	53	65	78
Reading Comprehension	58	66	72

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Prepress Technicians and Workers	Desktop Publishers	Importance
Computers and Electronics	72	65	69

Experience & Education Comparison

Related Work Experience Comparison

Description	Prepress Technicians and Workers	Desktop Publishers
10+ years	0%	0%
8-10 years	10%	0%
6-8 years	0%	0%
4-6 years	22%	32%
2-4 years	13%	11%
1-2 years	25%	33%
6-12 months	22%	15%
3-6 months	2%	1%
1-3 months	0%	3%
0-1 month	1%	0%
None	2%	1%

Required Education Level Comparison

Description	Prepress Technicians and Workers	Desktop Publishers
Doctoral	0%	0%
Professional Degree	0%	0%
Post-Masters Cert	0%	0%
Master's Degree	0%	0%
Post-Bachelor Cert	0%	0%
Bachelors	0%	4%
AA or Equiv	23%	0%
Some College	23%	26%
Post-Secondary Certificate	27%	16%
High Scool Diploma or GED	25%	51%
No HSD or GED	0%	0%

Prepress Technicians and Workers	Desktop Publishers

Most Common Educational/Training Requirement:

Postsecondary vocational award	Postsecondary vocational award

Job Zone Comparison

3 - Job Zone Three: Medium Preparation Needed	3 - Job Zone Three: Medium Preparation Needed
Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.	Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.
Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.	Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.
Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.	Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Tasks

Prepress Technicians and Workers

Core Tasks

Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Interacting With Computers - Using computers and computer systems

Desktop Publishers

Core Tasks

Generalized Work Activities:

- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Thinking Creatively - Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.
- Updating and Using Relevant Knowledge -

(including hardware and software) to program, write software, set up functions, enter data, or process information.

- Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.

Keeping up-to-date technically and applying new knowledge to your job.

- Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.

Specific Tasks

Occupation Specific Tasks:

- Activate scanners to produce positive or negative films for the black-and-white, cyan, yellow, and magenta separations from each original copy.
- Analyze originals to evaluate color density, gradation highlights, middle tones, and shadows, using densitometers and knowledge of light and color.
- Arrange and mount typeset material and illustrations into paste-ups for printing reproduction, based on artists' or editors' layouts.
- Correct minor film mask defects with litho tape or opaquing fluid.
- Enter, position, and alter text size, using computers, to make up and arrange pages so that printed materials can be produced.
- Enter, store, and retrieve information on computer-aided equipment.
- Examine finished plates to detect flaws, verify conformity with master plates, and measure dot sizes and centers, using light-boxes and microscopes.
- Examine photographic images for obvious imperfections prior to plate making.
- Examine unexposed photographic plates to detect flaws or foreign particles prior to printing.
- Inspect developed film for specified results and quality, using magnifying glasses and scopes; forward acceptable negatives or positives to other workers or to customers.
- Lower vacuum frames onto plate-film assemblies, activate vacuums to establish contact between film and plates, and set timers to activate ultraviolet lights that expose plates.
- Maintain, adjust, and clean equipment, and perform minor repairs.
- Mix solutions such as developing solutions and colored coating solutions.
- Monitor contact between cover glass and masks inside vacuum frames, in order to prevent flaws resulting from overexposure or light reflection.
- Mount negatives and plates in cameras, set exposure controls, and expose plates to light through negatives in order to transfer images onto plates.
- Operate and maintain a variety of

Specific Tasks

Occupation Specific Tasks:

- Check preliminary and final proofs for errors and make necessary corrections.
- Collaborate with graphic artists, editors and writers to produce master copies according to design specifications.
- Convert various types of files for printing or for the Internet, using computer software.
- Create special effects such as vignettes, mosaics, and image combining, and add elements such as sound and animation to electronic publications.
- Edit graphics and photos using pixel or bitmap editing, airbrushing, masking, or image retouching.
- Enter data, such as coordinates of images and color specifications, into system to retouch and make color corrections.
- Enter digitized data into electronic prepress system computer memory, using scanner, camera, keyboard, or mouse.
- Enter text into computer keyboard and select the size and style of type, column width and appropriate spacing for printed materials.
- Import text and art elements such as electronic clip-art or electronic files from photographs that have been scanned or produced with a digital camera, using computer software.
- Load floppy disks or tapes containing information into system.
- Operate desktop publishing software and equipment to design, lay out, and produce camera-ready copy.
- Position text and art elements from a variety of databases in a visually appealing way to design print or web pages, using knowledge of type styles and size and layout patterns.
- Prepare sample layouts for approval, using computer software.
- Select number of colors and determine color separations.
- Store copies of publications on paper, magnetic tape, film or diskette.
- Study layout or other design instructions to determine work to be done and sequence of operations.
- Transmit, deliver or mail publication master to printer for production into film and plates.
- View monitors for visual representation of

- cameras and equipment, such as process, line, halftone, and color separation cameras, enlargers, electronic scanners, and contact equipment.
- Operate and maintain laser plate-making equipment that converts electronic data to plates without the use of film.
- Operate presses to print proofs of plates, monitoring printing quality to ensure that it is adequate.
- Perform close alignment or registration of double and single flats to sensitized plates prior to exposure, in order to produce composite images.
- Perform minor deletions, additions, or corrections to completed plates, on or off printing presses, using tusche, printing ink, erasers, and needles.
- Perform tests to determine lengths of exposures, by exposing plates, scanning line copy, and comparing exposures to tone range scales.
- Place masking paper on areas of plates not covered by positives or negatives, in order to prevent exposure.
- Position and angle screens for proper exposure.
- Position color transparencies, negatives, or reflection copies on scanning drums, and mount drums and heads on scanners.
- Punch holes in light-sensitive plates and insert pins in holes to prepare plates for contact with positive or negative film.
- Remove plate-film assemblies from vacuum frames, and place exposed plates in automatic processors to develop images and dry plates.
- Reposition lamps and adjust aperture controls in order to provide high quality images.
- Scale copy for reductions and enlargements, using proportion wheels.
- Select proper types of plates according to press run lengths.
- Set scanners to specific color densities, sizes, screen rulings, and exposure adjustments, using scanner keyboards or computers.
- Transfer images from master plates to unexposed plates, and immerse plates in developing solutions to develop images.
- Unload exposed film from scanners, and place film in automatic processors to develop images.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- arrange galley setups of type
- assure quality control in printing processes
- clean equipment or machinery

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work in progress and for instructions and feedback throughout process, making modifications as necessary.

Detailed Tasks

Detailed Work Activities:

- achieve special camera effects
- create art from ideas
- design advertising layouts
- develop new office forms
- develop tables depicting data
- distinguish details in graphic arts material
- identify color or balance
- inspect manufactured products or materials
- load tapes, disks or paper into computers or peripherals
- operate cameras
- operate scanner
- paste up materials to be printed
- prepare artwork for camera or press
- proofread printed or written material
- read technical drawings
- read work order, instructions, formulas, or processing charts
- select materials or tools
- set page layout or composition
- use computer graphics design software
- use computers to enter, access or retrieve data
- use desktop publishing software
- use graphic arts techniques
- use knowledge of paper characteristics in publishing or printing processes
- use word processing or desktop publishing software

Tools - Examples

- Desktop computers
- Pen tablets
- Laser printers
- Notebook computers
- Scanners

- compute production, construction, or installation specifications
- determine film exposure settings
- determine specifications
- develop film or other photographic medium
- distinguish colors
- distinguish details in graphic arts material
- examine products or work to verify conformance to specifications
- fabricate printing plates
- fabricate, assemble, or disassemble manufactured products by hand
- identify color or balance
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- make independent judgment in assembly procedures
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- operate cameras
- operate graphic reproduction equipment
- operate printing equipment/machinery
- operate scanner
- operate video recorders
- paste up materials to be printed
- perform safety inspections in manufacturing or industrial setting
- prepare artwork for camera or press
- process photographic prints
- proofread printed or written material
- read blueprints
- read production layouts
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- set page layout or composition
- set up production equipment or machinery
- strip negatives
- understand technical operating, service or repair manuals
- use color analyzer
- use computer graphics design software
- use computers to enter, access or retrieve data

- use densitometer
- use drafting or mechanical drawing techniques
- use hand or power tools
- use precision measuring tools or equipment

Labor Market Comparison

Description	Prepress Technicians and Workers	Desktop Publishers	Difference
Median Wage	$ 30,620	$ 32,200	$ 1,580
10th Percentile Wage	$ 20,010	$ 25,640	$ 5,630
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	$ 35,650	$ 37,710	$ 2,060
90th Percentile Wage	$ 39,160	$ 44,040	$ 4,880
Mean Wage	$ 30,260	$ 33,360	$ 3,100
Total Employment - 2007	300	130	-170
Employment Base - 2006	303	137	-166
Projected Employment - 2016	249	156	-93
Projected Job Growth - 2006-2016	-17.8 %	13.9 %	31.7 %
Projected Annual Openings - 2006-2016	5	5	0

National Job Posting Trends

Trend for Prepress Technicians and Workers	Trend for Desktop Publishers

Job Trends from Indeed.com
— Prepress Technician — Desktop Publisher
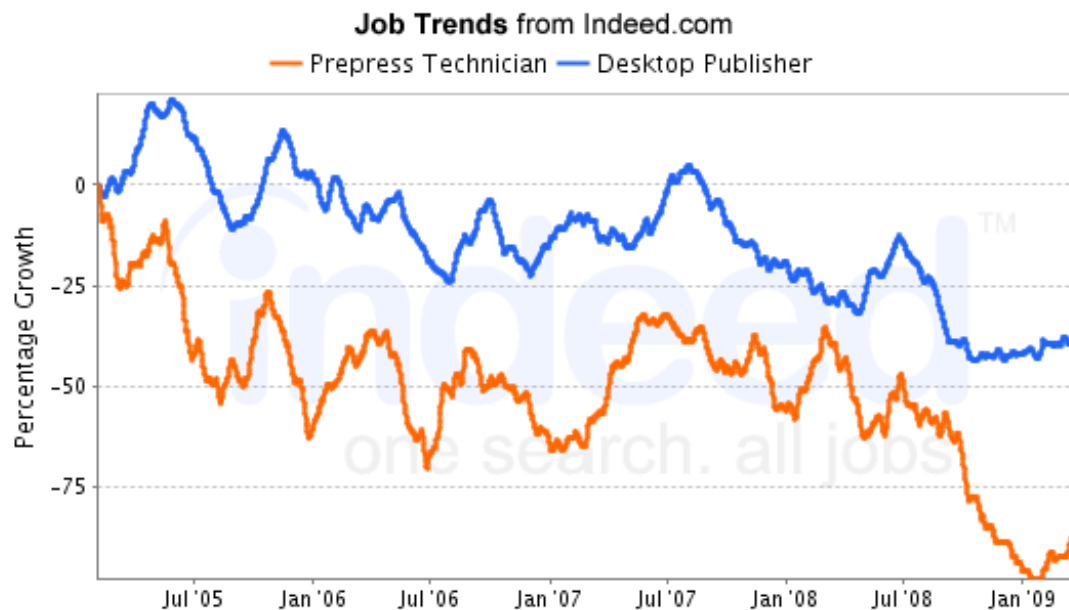
Data from [Indeed](#)

Recommended Programs

Prepress/Desktop Publishing and Digital Imaging Design

Prepress/Desktop Publishing and Digital Imaging Design. A program that prepares individuals to apply technical knowledge and skills to the layout, design and typographic arrangement of printed and/or electronic graphic and textual products. Includes instruction in printing and lithographic equipment and operations; computer hardware and software; digital imaging; print preparation; page layout and design; desktop publishing; and applicable principles of graphic design and web page design.

No schools available for the program

Maine Statewide Promotion Opportunities for Prepress Technicians and Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-5022.00	Prepress Technicians and Workers	100	3	300	$30,620.00	$0.00	-18%	5
43-9031.00	Desktop Publishers	83	3	130	$32,200.00	$1,580.00	14%	5
27-1024.00	Graphic Designers	81	4	700	$34,090.00	$3,470.00	5%	30
51-4121.07	Solderers and Brazers	79	2	1,610	$38,030.00	$7,410.00	7%	49
27-4032.00	Film and Video Editors	79	3	80	$30,810.00	$190.00	-4%	2
27-3042.00	Technical Writers	77	4	50	$46,060.00	$15,440.00	-8%	2
43-9011.00	Computer Operators	77	3	230	$33,120.00	$2,500.00	-30%	4
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	77	2	120	$36,960.00	$6,340.00	2%	3
15-1041.00	Computer Support Specialists	75	3	1,670	$40,200.00	$9,580.00	5%	61
17-3031.02	Mapping Technicians	75	3	190	$33,210.00	$2,590.00	5%	5
23-2091.00	Court Reporters	74	3	0	$53,640.00	$23,020.00	0%	0
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	74	2	970	$41,950.00	$11,330.00	-12%	10
27-1014.00	Multi-Media Artists and Animators	73	4	70	$44,630.00	$14,010.00	9%	10

| 49-2011.00 | Computer, Automated Teller, and Office Machine Repairers | 73 | 3 | 640 | $32,000.00 | $1,380.00 | 3% | 12 |
| 51-2021.00 | Coil Winders, Tapers, and Finishers | 73 | 2 | 90 | $31,910.00 | $1,290.00 | -53% | 1 |

Top Industries for Desktop Publishers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	24.00%	7,638	6,052	-20.77%
Newspaper publishers	511110	11.44%	3,642	3,120	-14.33%
Management of companies and enterprises	551100	4.37%	1,390	1,603	15.28%
Advertising and related services	541800	2.52%	802	905	12.83%
Self-employed workers, secondary job	000602	2.17%	692	689	-0.45%
Specialized design services	541400	2.09%	666	891	33.81%
Colleges, universities, and professional schools, public and private	611300	1.68%	535	598	11.87%
Religious organizations	813100	1.41%	449	538	20.01%
Computer systems design and related services	541500	1.32%	419	566	35.02%
Office supplies, stationery, and gift stores	453200	1.10%	349	288	-17.50%
Local government, excluding education and hospitals	939300	0.96%	306	344	12.34%
Employment services	561300	0.80%	254	322	26.56%
Management, scientific, and technical consulting services	541600	0.77%	244	435	78.53%
Software publishers	511200	0.68%	217	279	28.76%
Internet publishing and broadcasting	516100	0.61%	194	272	40.33%

Top Industries for Prepress Technicians and Workers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	58.29%	41,328	29,471	-28.69%
Newspaper publishers	511110	15.03%	10,658	8,218	-22.90%
Converted paper product manufacturing	322200	4.22%	2,995	2,262	-24.47%
Advertising and related services	541800	1.62%	1,149	1,167	1.55%
Specialized design services	541400	1.29%	915	1,102	20.43%
Employment services	561300	0.85%	603	687	13.91%

Data processing, hosting, and related services	518200	0.73%	517	629	21.67%
Plastics product manufacturing	326100	0.67%	473	451	-4.60%
Colleges, universities, and professional schools, public and private	611300	0.58%	411	413	0.68%
Management of companies and enterprises	551100	0.53%	373	387	3.75%
Semiconductor and other electronic component manufacturing	334400	0.42%	294	232	-21.33%
Federal government, excluding postal service	919999	0.36%	254	216	-14.92%
Paper and paper product merchant wholesalers	424100	0.34%	244	234	-3.85%
State government, excluding education and hospitals	929200	0.26%	186	164	-11.69%
Manufacturing and reproducing magnetic and optical media	334600	0.22%	153	135	-11.57%